SCIENCE ADVISORY BOARD

Executive Committee Meeting

U.S. Environmental Protection Agency

401 M Street, SW Washington, DC Room W1103 October 28-29, 1998

(B-43)

I. Attendees

MEMBERS

- Dr. Joan Daisey (Chair)
- Dr. Richard Bull
- Dr. Maureen Cropper

10/29

- Dr. Kenneth Cummins
- Dr. Hilary Inyang
- Dr. Morton Lippmann
- Dr. Alan Maki
- Dr. Joseph Mauderly
- Dr. Granger Morgan 10/28
- Dr. Emil Pfitzer
- Dr. W. Randall Seeker
- Dr. Ellen Silbergeld (by phone)

10/28 AM

- Dr. William Smith
- Dr. Eugene McConnell, FIFRA Scientific Advisory Panel Chair
- Dr. Donald Barnes, Designated Federal Officer

Others present at the meeting are listed on the sign-in sheets (Attachment A).

II. Agenda (Attachment B)

[The items are presented in these minutes in their most logical, not necessarily their most chronological, order.]

III. Introduction

A. Chair's Introduction

Dr. Daisey introduced the meeting by acknowledging the contributions of members whose terms were expiring on the Executive Committee:

- 1. Dr. Mark Harwell (EPEC Chair)
- 2. Dr. Al Maki (EC member)
- 3. Dr. Emil Pfitzer (EHC Chair),

welcoming new members

- 1. Dr. Kenneth Cummins (EC member)
- 2. Dr. William Smith (EC member)
- 3. Dr. Mark Utell (EHC Chair), and

and noting the elevation of EC member Dr. Terry Young to the post of EPEC Chair. On behalf of the Agency and the Board, Dr. Barnes presented Dr. Pfitzer with a plaque and Dr. Maki with a certificate of appreciation for their services.

The Chair cautioned Members about contacts with outside parties during the period of preparation of reports and thereafter.

<u>INSTRUCTION 1</u>: The Chair asked:

- a) Dr. Barnes to re-distribute the Board's policy on contacts with outside parties, and
- b) The Committee chairs and DFOs to review this information with their Committee Members.

Dr. Daisey briefly reviewed her meetings with Agency leaders on the previous day:

- 1. Mr. Peter Robertson, Acting Deputy Administrator
- 2. Mr. Rob Brenner, Acting DAA/OAR
- 3. Ms. Dana Minerva, DAA/OW
- 4. Mr. Derry Allen, OP
- 5. Mr. Tom Vanek, House Science Committee Staff
- 6. Dr. Norine Noonan, AA/ORD

In particular, she mentioned the concern expressed by Mr. Brenner and Ms. Minerva about the overlapping activities of the SAB and National Research Council on such issues as particulate matter monitoring, mercury risk assessment, and copper risk assessment.

B. Staff Director's Updates

Dr. Barnes announced the FY98 edition of the Annual Staff Report on the SAB was nearing completion and would be sent to the members soon.

He announced recent changes in top leadership at the Agency:

- 1. Mr. Romey Diaz, AA/OARM
- 2. Mr. Chuck Fox, AA/OW
- 3. Dr. Norine Noonan, AA/ORD
- 4. Mr. Robert Perciasepe, AA/OAR
- 5. Ms. Nikki Tinsley, Inspector General

Dr. Barnes unveiled photographs of the four most recent SAB Chairs that will grace the SAB Conference Room:

- 1. Dr. Norton Nelson, 1984-1989
- 2. Dr. Raymond Loehr, 1989-1993
- 3. Dr. Genevieve Matanoski, 1993-1997
- 4. Dr. Joan Daisey, 1997-

IV. Interaction with Agency officials

A. Preparation for visit with Agency leaders

Dr. Daisey reviewed some of the highlights of her meeting with Mr Robertson, which included an emphasis on the Cumulative Risk issue and the role that the SAB might play on this matter. Other issues that Members mentioned included the following:

- 1. Science and the budget
- 2. Data
 - a. Agency task force on reorganization
 - b. SAB activity (cf., EEC and EC/Secondary Data Use Subcommittee)
- 3. Integrated Risk Project (IRP)
- B. Meeting with Acting Deputy Administrator Peter Robertson Mr. Robertson emphasized the following points:
 - 1. Like Fred Hansen, he looks forward to a strong relationship with the SAB through both formal and informal contacts.
 - 2. There will be a major emphasis over the next several years on implementing the Agency's policy on Cumulative Risk. He has discussed the matter with the Agency's Science Policy Council and envisions an SAB Consultation, an Advisory(ies), and a final Review. The Agency is in the process of defining the scope of this endeavor and will come to the SAB for a Consultation in the spring.
 - 3. He will seek informal, instructional information on issues associated with the chloroform controversy.
 - 4. He will seek input on the issue of economic analysis.
 - 5. The Administrator will meet with the SAB EC at either their January or April meeting.

In the wide-ranging discussion that followed, the SAB members brought up the following points:

- 1. The DWC is working with OW to devise a method for appropriately addressing science issues associated with the Phase II disinfection and disinfectants by-products action.
- 2. The Administrator's and Deputy Administrator's October 15 memo on Information Challenge coincides with SAB activity of the EC Subcommittee on Secondary Data Use, the EEC Subcommittee on Quality, and the DWC recent review of survey design. The possibility of a "guideline on data", comparable to the risk assessment guidelines, and subsequent SAB review, was discussed. Also, the EEC effort is revealing problems similar to those identified in a recent report from the Agency's Inspector General.

- Mr. Robertson welcomed the SAB's interest, experience, and advice on these matters. He emphasized the importance of quality and the need for the end user's appreciation of quality of the data.
 - <u>INSTRUCTION 2</u>: The Chair asked Dr. Barnes to arrange for appropriate SAB members to talk individually with Ms. Margaret Schneider, who is currently coordinating the Agency's effort on the information challenge.
- 3. The SAB is looking into the use of science in some of the newer approaches being used by the Agency for environmental protection. The Board is planning a workshop on the topic later next year.
 - Mr. Robertson updated the SAB on some of the recent organizational shifts affecting these new approaches. He felt confident that the current legislative structure provided the basis for these actions and that there was no need for much wisdom in seeking new legislation at this time.
- 4. In response to a question, Mr. Robertson discussed the Agency's current budget situation and the circumstances that have resulted in significant cuts having to be absorbed in some areas. The Operating Plan for the FY99 is being developed right now.
 - Several Board Members expressed concern about the net impact on science at the Agency.
 - <u>INSTRUCTION 3</u>: The Chair asked Dr. Barnes to send copies of the Agency's FY99 Operating Plan to EC members when it becomes available.
- C. Meeting with Agency Staff on the budget and GPRA Mr. Joshua Baylson briefed the EC on the Agency's approach to implementing the Government Performance and Results Act, which effectively links the Agency's environmental goals to its budget and its performance (Attachment C). Among the points made in the subsequent discussion were the following:
 - 1. The Agency is still new at this game, especially in finding environmental outcome measures, rather than simply process measures.
 - 2. ORD is doing a good job of linking its program to the Agency's goals.
 - 3. Cross-Agency activities (e.g., computer support, quality assurance program, and the SAB) and goals that are affected by more than one Agency (e.g.,

- clean water) more difficult to address in GPRA. [South Florida reclamation is a good model of inter-Agency cooperation.]
- 4. SAB can help by suggesting ways to better frame the goals so that they can be evaluated through better environmental outcome measures.

INSTRUCTION 4: ENVIRONMENTAL OUTCOME MEASURES The Chair asked the Agency to provide the EC with a list of the four current environmental outcome measures.

D. Meeting with Dr. Norine Noonan, AA/ORD
Dr. Norine Noonan, new AA/ORD, is looking forward to
working closely with the Board and the Board of Scientific
Counselors (BOSC) on a wide range of scientific issues, including
mercury and particular matter. She has not formulated detailed
plans yet, but she intends to maintain the re-structuring put
into place by Dr. Huggett. While progress has been made, EPA is
not yet recognized as a science Agency the way she would like it
to be.

The subsequent discussion brought out a number of points, including the following:

- 1. Sometimes legislation and policy place the science in a position of "playing catch up"; cf., certain elements of the Food Ouality Protection Act.
- 2. The research planning process is a continuing challenge that requires near-constant updating.
- 3. Research planning needs to take a broad perspective. For example, a pollutant-specific, Agency-by-Agency approach to air research is inherently inefficient.
- 4. Determining and developing the proper skill mix for ORD is another challenge.
- 5. Social sciences, including economics, are legitimate entities in the Agency's research structure.

 Economists can provide a unique perspective on the formulation of research in other disciplines, whose results will be input to the economists.
- 6. The SAB is in the process of reviewing elements of the STAR program.
- 7. Ecosystem (e.g., watershed) approaches make sense. They require close cooperation among different levels and entities of government.
- 8. The collection, quality, and use of data are important issues.

V. Reports from the Committees

In keeping with decisions at the Strategic Planning Retreat, the Committee Chairs limited their remarks, most often referring to the Committee Activity Summary (Attachment).

A. <u>Advisory Council on Clean Air Act Compliance Analysis</u> (Council)

In the absence of Dr. Freeman, who was unable to attend due to a family emergency, Dr. Jack Kooyoomjian, DFO for the Council, updated the EC on recent activities.

B. Clean Air Act Scientific Advisory Committee (CASAC)
Dr. Joe Mauderly, CASAC Chair, briefly updated the EC on activities of the Committee. He then described his efforts to resolve an apparent overlap between CASAC activities and Congressionally-mandated studies by the National Research Council on particulate matter (PM) related issues.

INSTRUCTION 5 : SAB AND NRC

The EC encouraged Dr. Mauderly in his efforts to reduce/resolve duplication of efforts between CASAC and NRC on PM related issues. The Chair asked him to work with Dr. Barnes to make it so.

C. Drinking Water Committee (DWC)

Dr. Richard Bull, DWC Chair, briefly updated the EC on activities of the Committee. He had talked with Mr. Longest (ORD) on the previous day and made progress in teeing up a DWC review of future drinking water research plans. Also, DWC will be looking into comparative risk decisions, such as chemical risks vs. microbial risks, and would welcome input from other committees.

INSTRUCTION 6 : COMPARATIVE RISK

The Chair asked any Committee with an interest in exploring comparative risk issues, such as chemical vis microbial risks, to contact DWC.

Review of Report on Affordability

Dr. Freeman, Lead Discussant, was unable to attend the meeting due to a family emergency. Dr. Pfitzer, Associate Discussant, found the report to be generally good. Other members commented on a role for EEAC in such reviews and the large number of acronyms.

ACTION 1: DWC REPORT ON AFFORDABILITY

The Executive Committee approved the Advisory of the Drinking Water Committee (DWC) on THE NATIONAL-LEVEL AFFORDABILITY CRITERIA AND TECHNOLOGIES FOR SMALL SYSTEMS UNDER THE AMENDMENTS TO THE SDWA with modest editorial changes and no further review by the vettors.

- D. <u>Environmental Economics Advisory Committee (EEAC)</u>
 Mr. Tom Miller, EEAC DFO, briefly updated the EC on key activities of the Committee.
- E. <u>Ecological Processes and Effects Committee (EPEC)</u>
 Ms. Stephanie Sanzone, DFO for EPEC, briefly updated the EC on key activities of the Committee.
- F. Environmental Engineering Committee (EEC)

 Dr. Hillary Inyang, EEC Chair, briefly updated the EC on key activities of the Committee.

INSTRUCTION 7 : EEC INITIATIVES

The Chair asked Dr. Inyang to circulate the project sheets for a number of projects being considered by the EEC in order to explore the interest of other Committees in them; e.g., use of biological response endpoints.

- G. Environmental Health Committee (EHC)
- Dr. Emil Pfitzer, EHC Co-Chair, briefly updated the EC on key activities of the Committee.
- 1. Review of Acute Reference Exposure
 He reported that the report on the Acute Reference Exposure
 had been re-written to the satisfaction of the earlier
 discussants (Dr. Brown and McConnell). Dr. Daisey cautioned
 against making policy statements in SAB reports.
 - ACTION 2: EHC REPORT ON ACUTE REFERENCE EXPOSURE

 The Executive Committee approved the Report of the Environmental Health Committee (EHC) on REVIEW OF METHOD FOR EXPOSURE-RESPONSE ANALYSIS FOR ACUTE INHALATION EXPOSURE TO CHEMICALS: DEVELOPMENT OF THE ACUTE REFERENCE EXPOSURE with no further review by the vettors. Members are to be reminded of the cautions about commenting on policy matters.

2. Review of the Lead 403 Rule

Dr. Pfitzer introduced the review of the EHC report on the Lead 403 rule. Dr. Daisey, the Lead Discussant, found it to be a good report, although she enumerated a number of items for attention, transferring her comments to Dr. Pfitzer and Ms. Roslyn Edson, the EHC DFO. Dr. Inyang, the Associate Discussant, concurred and supplied some additional comments.

Dr. Silbergeld, joining by telephone, referred to an article which was a part of the EC's package and raised five main concerns:

- a. The IEUBK model is not a good predictor of blood lead levels.
- b. The paint-soil-dust correlations are important; cf., the paper she had submitted.
- c. The use of drip line data in averaging.
- d. The Agency's cost-benefit analysis would support a stronger standard, especially if the benefits to all of the children 0-6 years old were considered.
- e. There are clear environmental justice issues that the Agency has not addressed.

She will submit these concerns in writing.

Dr. Barnes reminded the EC that it is important to the Agency that they receive the SAB's input in a timely manner.

ACTION 3. EHC REPORT ON LEAD 403 RULE

The Executive Committee approved the Report of the Environmental Health Committee (EHC) on THE TECHNICAL REVIEW OF THE PROPOSED TSCA SECTION 403 REGULATION (IDENTIFICATION OF DANGEROUS LEVELS OF LEAD), subject to:

- a. Dr. Pfitzer's consideration and disposition of Dr. Silbergeld's comments, and
- b. Final approval by the two vettors (Drs. Daisey and Inyang).

INSTRUCTION 8: POSSIBLE SAB REVIEW OF IEUBK MODEL
The Chair asked Dr. Barnes to explore
desirability of an SAB review of the
IEUBK model.

H. <u>Integrated Human Exposure Committee (IHEC)</u>
Ms. Roslyn Edson, IHEC DFO, briefly updated the EC on key activities of the Committee.

Review of the Report on the Disproportionate Impact Analysis Methodologies

Dr. Tom McKone, Co-Chair of the review panel, joined the meeting by telephone and introduced the Report. Dr. Morgan, Lead Discussant, found the report to be generally good. He raised some points beyond those in the report:

- 1. The importance of field data, when available.
- 2. The need to define what is meant by:

 "disproportionate". He suggested that in order to
 be disproportionate any difference between impacts
 on two subpopulations should exceed the
 uncertainties in the estimates; that is, they
 should be, at least, statistically
 distinguishable.
- 3. Neither "burden" or "load" convey the concept. In his remarks, Dr. Maki, the Associate Discussant, suggested the term "relative toxicity-weighted exposure". He also found the report to be acceptable.

The Agency's Dr. Loren Hall highlighted some of the points included in the Agency's comments (Attachment E):

- 1. The SAB should distinguish between the methods per se and the application of those methods to a specific site. In addition, the application provides insights for the methods.

 Response: Agreed in concept, but much of the material presented to the Committee by the Agency was in the form of an application to a specific site.
- 2. The SAB report should note that there are other measures for relative burden referred to in addition to the relative burden ratio (RBR).

 Response: The materials provided to the SAB emphasized the RBR. Dr. McKone will review the materials again and try to characterize the comments appropriately.
- 3. The SAB report should clarify some of the references to certain data sources.

 Response: Dr. McKone will look into it.
- ACTION 4: IHEC REPORT ON DISPROPORTIONATE IMPACT ANALYSIS

 The Executive Committee approved the Report of the
 Integrated Human Exposure Committee (IHEC) on
 REVIEW OF DISPROPORTIONATE IMPACT ANALYSIS
 METHODOLOGIES, subject to final approval by
 the vettors (Drs. Morgan and Maki).

I. Radiation Advisory Committee (RAC)

Dr. Jack Kooyoomjian, RAC DFO, briefly updated the EC on activities of the Committee. He noted in particular that the RAC has decided not to proceed with the Commentary on the Radiation Quality Assurance Program that had been discussed at the July 1998 meeting.

Review of the Federal Guidance-13 (Part 1)
Dr. Tom Gesell, Chair of the Subcommittee that wrote the report, joined the meeting by conference call.

Dr. Lippmann, Lead Discussant, complimented the Agency and the RAC for taking a step back from the traditional health physics approach to address this question from a fresh perspective. He had no serious criticism of the report. Dr. Bull, Associate Discussant, had modest suggestions for improvement. Some members felt that there should be more explicit discussion of the threshold question and hormesis.

ACTION 5: RAC REPORT ON FEDERAL GUIDANCE-13 PART 1

The Executive Committee approved the Report of the Radiation Advisory Committee (RAC) on REVIEW OF HEALTH RISKS FROM LOW-LEVEL ENVIRONMENTAL EXPOSURES TO RADIONUCLIDES, FEDERAL GUIDANCE REPORT 13 - PART 1), subject to the recommended changes, with no further EC review.

J. <u>Research Strategies Advisory Committee (RSAC)</u> Dr. Randy Seeker, RSAC Chair, briefly updated the EC on key activities of the Committee.

He also summarized a related Consultation with the Agency.

K. Special Subcommittees

1. D-CORMIX Model Subcommittee

Dr. Murarka, Subcommittee Chair, joined the meeting by phone and introduced the report. Mr. Robert Flaak, Subcommittee DFO, distributed Agency comments that had been received the day before. Dr. Seeker, Lead Discussant, found the report to be good. He agreed with the Agency's comment that the simulation data mentioned in the draft should be referenced more specifically. Dr. Smith, Associate Discussant, agreed. Mike Kravitz from the Agency made an editorial suggestion that was accepted by Dr. Murarka.

ACTION 6: EC/SUBCOMMITTEES REPORT ON D-CORMIX MODEL The Executive Committee approved the Report of the D-CORMIX Model Subcommittee on the Agency's REVIEW OF D-CORMIX MODEL subject to Dr. Murarka's addressing the issues raised by the EC and final approval by the Lead Vettor, Dr. Seeker.

2. Strategic Budget Criteria Subcommittee
Dr. Seeker, Subcommittee Chair, summarized the
Consultation that his Subcommittee had with the Agency regarding
the overall Agency science budget. The Office of the Chief
Financial Officer did a fine job of coordinating the
presentation. He remarked on the need to distinguish clearly
between Agency notes on such meetings -- which are to be strongly
encouraged -- and official SAB minutes.

3. Integrated Risk Project

In the absence of Dr. Matanoski due to illness, Mr. Tom Miller and Ms. Stephanie Sanzone reported on the status of the IRP. The Overview document is essentially complete and the longer document (the Exposition on Integrated Decisionmaking) should be completed by the end of November, at which time peer review can begin. Dr. Matanoski will brief Mr. Robertson on the report in about a month. She will also make a presentation at the annual meetings of the Society for Environmental Toxicology and Chemistry (SETAC) and the Society for Risk Analysis (SRA) before the end of the year.

- 4. Secondary Data Use Subcommittee
 Dr. Lippmann, SDUS Chair, briefly updated the EC on activities of the Subcommittee.
- 5. New Agency Approaches Subcommittee (NAAS)
 Dr. Morgan, NAAS Chair, briefly updated the EC on activities of the Subcommittee.

VI. Board Business and Concerns

The Role of SAB in Regulatory-Negotiations

Dr. Bull referred the members to the draft letter in the folder (Attachment F). He provided additional background, based on his discussion with Ms. Cynthia Daugherty the previous day. The EC members discussed various scenarios. After thinking about the options overnight and receiving a one-page options summary from Tom Miller (Attachment G), they endorsed Dr. Bull's general approach and looked forward to his future reports on the matter. In short, the EC felt that it was important to try some sort of

participatory experiment with the Phase II round, after having selected a non-participatory option in Phase I.

VII. Interaction with other groups

A. Discussion of "Unlocking Our Future: Toward a New National Science Policy", a study chaired by Congressman Vernon Ehlers for the House Science Committee.

Mr. Mike Champness (Study Director) and Mr. Robert Cook, both Staff members of the House Science Committee provided background on the study, as well as a summary of reactions to its release. The report identifies four major roles for science in today's society:

- 1. National security
- 2. Economic growth
- 3. Preparation of citizens for the future
- 4. Input to decisionmaking.

The last item is new and relates especially well to environmental problems. The report is not a prescriptive plan. It seeks to frame the issue and to seek input from groups such as the SAB, one of the most important technical advisory groups in the country.

The subsequent conversation covered a variety of points, including the following:

- 1. Aspects of the report relate well to what the SAB does; e.g., IRP.
- 2. The relative emphasis on "engineering" vs. "technology".
- 3. The limited personnel to do the variety of risk assessments envisioned as a consequence of the report recommendations.
- 4. The continuum of "basic" vs. "applied" research.
- 5. The need to manage information.
- 6. The need for Congress to take science at EPA seriously.
- 7. The SAB could help by both anticipating new areas of concern/research and also helping to "keep a firm hand on the tiller" to see research through to a fruitful conclusion.
- 8. The need for public risk communication.
- 9. The need for science education to be broader, more flexible, and shorter.
- 10. The report does not see that the science enterprise is "broken", but it does need some modest maintenance.

- 11. There are some legitimate uses to "pork"; i.e.,
 "earmarked" expenditures. But it should be
 explicit and strategically planned; e.g., funds
 set aside to more equally distribute grants
 geographically, ethnically, or whatever.
- 12. Look at ideas in the past that produced "winners"; e.g., efforts of Nobel prize winners, such as this year's prize for research on NO in the body. Read the book on Retrospectroscope.

INSTRUCTION 9 : REQUEST FOR REFERENCE

The Chair asked Dr. Pfitzer to provide the EC with reference to the book,

Retrospectroscope .

- B. Interaction with other advisory committees (Attachment H)
 The EC was joined on the telephone by the following:
 - 1. Dr. Deborah Gray, Ohio State University, member of the Environmental Science Advisory Committee (ESAC) of the City of Columbus, OH.
 - 2. Mr. Keith Harrison, Executive Director of the Michigan Environmental Science Board.
 - 3. Dr. Andre Knottnerus, Vice President, Health Council of the Netherlands.

(Ms. Liv Brakewood, a graduate student at the University of Connecticut, also joined the conversation via the telephone, since she is exploring a possible thesis on the potential benefits from interaction among advisory groups).

Dr. Inyang briefed the EC on a session at the 4th International Symposium Geoenvironmental Engineering and Sustainable Development held at the University of Massachusetts at Lowell in August. The session featured presentations by SAB, the ESAC, and the Health Council of the Netherlands. The intent was to explore potential benefits from increased interaction among advisory groups at different levels of government. In addition, the discussion highlighted barriers to such interaction and approaches to moving around or beyond those barriers.

Dr. Gray indicated that the ESAC is both intrigued and cautious. She is sending the SAB Staff a list of projects and issues that are of interest to the ESAC, such as environmental justice. There is particular interest in the issue of brownfields that is under discussion in the EEC. Dr. Inyang indicated that the EEC would connect interested ESAC members into that portion of the December 1-3 meeting dealing with brownfields.

INSTRUCTION 10 : ESAC AND BROWNFIELDS

Dr. Inyang asked that the SAB Staff make arrangements for interested parties of the Columbus, OH ESAC to be connected by telephone to the portion of the December 1-3 meeting that will address brownfields.

Dr. Harrison was not a part of the International Symposium discussion, but he indicated an interest of the Michigan Environmental Science Board to explore possible interactions. He felt that the governor would be interested in such cooperation.

INSTRUCTION 11 : SAMPLES OF MI ESB REPORTS

The Chair asked Dr. Barnes to obtain a sample of some of that the reports of that the Michigan Environmental Science Board; e.g., those on mercury and lead.

Dr. Knottnerus reported that the President and the Directors of the Council applauded the possible interaction between the Council and the SAB. Possibilities in the following:

- 1. Areas of exchange; e.g.,
 - a. Programs of work
 - b. Reports
 - c. Experts
 - d. Organizational and operational methods.
- 2. Liaison participation in reviews.
- 3. Parallel reviews on common topics.
- 4. Joint reviews of documents.

The Council will open its World Wide Web page in January. Dr. Knottnerus indicated his willingness to participate as a liaison expert in the SAB/SAP consideration of issues surrounding the testing of human subjects on December 10-11. Other topics of interest to the Council include methodologies and assessing health effects of large airports. At the operational level, the Council is interested in the SAB's experience in assessing the impact of its activities. In closing, he said that he is more optimistic that barriers to cooperation can be overcome. He counts among those barriers the need to synchronize activities in a given area and orchestrate logistics. He does not believe that different cultures present any significant barriers.

Dr. McConnell noted particularly that the upcoming (December 10-11) SAB/SAP joint review of the Agency's testing of human subjects practices and policies. Dr. Bull also identified the March 30-April joint SAB/SAP review the Agency's plans for endocrine disruptors as another fruitful area. Dr. Inyang looked

forward to benefiting from the experience of the Council in providing advice on the handling of waste.

INSTRUCTION 12: UPCOMING OPPORTUNITIES FOR INTERACTIONS WITH HEALTH COUNCIL

The Chair encouraged Dr. McConnell and Dr.

Utell (Co-Chairs for the SAB/SAP review
of testing of human subjects) to include
Dr. Knottnerus as a panel participant.
They should also explore interaction on
the endocrine disruptors review in March
1999. Further, the EEC should look into
exchanges of experience on issues of
common interest, such as waste.

INSTRUCTION 13: SAB IMPACT EVALUATION TO HEALTH COUNCIL

The Chair asked the SAB Staff to provide the

Health Council of the Netherlands with a

summary of the SAB's experience in

conducting retrospective analyses of its

activities; e.g., those of the EC, the

EEC, and the RAC.

Reference was made to bilateral arrangements between the Netherlands and the United States in matters associated with air pollution. Connections with "RIVM" was also mentioned.

<u>INSTRUCTION 14</u>: BILATERAL AGREEMENTS BETWEEN UNITED STATES AND THE NETHERLANDS

The Chair asked Dr. Barnes and Dr. Knottnerus to explore existing bilateral connections between the Netherlands and the United States that could illuminate the SAB's evolving relationship with the Health Council.

C. Scientific Advisory Panel

Dr. Eugene McConnell. SAP Chair, summarized recent activities of the SAP (Attachment I). Among that the topics of special interest were the following:

- 1. Low-dose extrapolations of risk.
- 2. Exposure problems associated with dichlorvos.
- 3. The additional 10X uncertainty for children.

The next SAP meeting on Dec. 8-10 will address ecological effects of organophosphate pesticides [Is there an EPEC connection here?], developmental neurotoxicity studies, and more discussion of the 10X uncertainty factor for children. Some members noted that the 10X uncertainty factor for children could have ramifications in programs outside the pesticide program, where

there is no authority to require additional data as there is in the Pesticide Program.

The meeting adjourned at 11:20 AM.

Respectfully submitted,

Concurred,

Joan M. Dalisey, Ph.D.

Donald G. Barnes, Ph.D. EC Designated Federal Officer

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ACTION ITEMS AND INSTRUCTIONS SAB EXECUTIVE COMMITTEE MEETING October 28-29, 1998

ACTION ITEMS

ACTION 1: DWC REPORT ON AFFORDABILITY

The Executive Committee approved the Advisory of the Drinking Water Committee (DWC) on THE NATIONAL-LEVEL AFFORDABILITY CRITERIA AND TECHNOLOGIES FOR SMALL SYSTEMS UNDER THE AMENDMENTS TO THE SDWA with modest editorial changes and no further review by the vettors.

ACTION 2: EHC REPORT ON ACUTE REFERENCE EXPOSURE

The Executive Committee approved the Report of the Environmental Health Committee (EHC) on REVIEW OF METHOD FOR EXPOSURE-RESPONSE ANALYSIS FOR ACUTE INHALATION EXPOSURE TO CHEMICALS: DEVELOPMENT OF THE ACUTE REFERENCE EXPOSURE with no further review by the vettors. Members are to be reminded of the cautions about commenting on policy matters.

ACTION 3. EHC REPORT ON LEAD 403 RULE

The Executive Committee approved the Report of the Environmental Health Committee (EHC) on THE TECHNICAL REVIEW OF THE PROPOSED TSCA SECTION 403 REGULATION (IDENTIFICATION OF DANGEROUS LEVELS OF LEAD), subject to:

- a. Dr. Pfitzer's consideration and disposition of Dr. Silbergeld's comments, and
- b. Final approval by the two vettors (Drs. Daisey and Inyang).
- ACTION 4: IHEC REPORT ON DISPROPORTIONATE IMPACT ANALYSIS

 The Executive Committee approved the Report of the

 Integrated Human Exposure Committee (IHEC) on

 REVIEW OF DISPROPORTIONATE IMPACT ANALYSIS

 METHODOLOGIES, subject to final approval by the

 vettors (Drs. Morgan and Maki).
- ACTION 5: RAC REPORT ON FEDERAL GUIDANCE-13 PART 1

 The Executive Committee approved the Report of the Radiation Advisory Committee (RAC) on REVIEW OF HEALTH RISKS FROM LOW-LEVEL ENVIRONMENTAL EXPOSURES TO RADIONUCLIDES, FEDERAL GUIDANCE

REPORT 13 - PART 1), subject to the recommended changes, with no further EC review.

ACTION 6: EC/SUBCOMMITTEE REPORT ON D-CORMIX MODEL

The Executive Committee approved the Report of the D
CORMIX Model Subcommittee on the Agency's REVIEW

OF D-CORMIX MODEL subject to Dr. Murarka's

addressing the issues raised by the EC and final
approval by the Lead Vettor, Dr. Seeker.

INSTRUCTIONS

- INSTRUCTION 1: SAB POLICY ON CONTACT WITH OUTSIDE PARTIES
 The Chair requested that:
 - a) Dr. Barnes to re-distribute the Board's policy on contacts with outside parties, and
 - b) The Committee chairs and DFOs to review this information with their Committee Members.
- INSTRUCTION 2: INPUT OF SAB MEMBERS ON THE INFORMATION CHALLENGE
 The Chair asked Dr. Barnes to arrange for
 appropriate SAB members to talk individually
 with Ms. Margaret Schneider, who is currently
 coordinating the Agency's effort on the
 information challenge.
- INSTRUCTION 3: SCIENCE IN THE FY99 OPERATING PLAN

 The Chair asked Dr. Barnes to send copies of the Agency's FY99 Operating Plan to EC members when it becomes available.
- INSTRUCTION 4: ENVIRONMENTAL OUTCOME MEASURES

 The Chair asked the Agency to provide the EC with
 a list of the four current environmental
 outcome measures.
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 The EC encouraged Dr. Mauderly in his efforts to reduce/resolve duplication of efforts between CASAC and NRC on PM related issues. The Chair asked him work with Dr. Barnes to make

it so.

INSTRUCTION 6: COMPARATIVE RISK

The Chair asked any Committee with an interest in exploring comparative risk issues, such as chemical vis microbial risks, to contact DWC.

INSTRUCTION 7: EEC INITIATIVES

The Chair asked Dr. Inyang to circulate the project sheets for a number of projects being considered by the EEC in order to explore the interest of other Committees in them; e.g., use of biological response endpoints.

INSTRUCTION 8: POSSIBLE SAB REVIEW OF IEUBK MODEL

The Chair asked Dr. Barnes to explore desirability of an SAB review of the IEUBK model.

INSTRUCTION 9: REQUEST FOR REFERENCE

The Chair asked Dr. Pfitzer to provide the EC with reference to the book, <u>Retrospectroscope</u>.

INSTRUCTION 10: ESAC AND BROWNFIELDS

Dr. Inyang asked that the SAB Staff make arrangements for interested parties of the Columbus, OH ESAC to be connected by telephone to the portion of the December 1-3 meeting that will address brownfields.

INSTRUCTION 11: SAMPLES OF MI ESB REPORTS

The Chair asked Dr. Barnes to obtain a sample of some of that the reports of that the Michigan Environmental Science Board; e.g., those on mercury and lead.

INSTRUCTION 12: UPCOMING OPPORTUNITIES FOR INTERACTIONS WITH HEALTH COUNCIL

The Chair encouraged Dr. McConnell and Dr. Utell (Co-Chairs for the SAB/SAP review of testing of human subjects) to include Dr. Knottnerus as a panel participant. They should also explore interaction on the endocrine disruptors review in March 1999. Further, the EEC should look into exchanges of experience on issues of common interest, such as waste.

INSTRUCTION 13: SAB IMPACT EVALUATION TO HEALTH COUNCIL The Chair asked the SAB Staff to provide the Health Council of the Netherlands with a summary of the SAB's experience in conducting

retrospective analyses of its activities; e.g., those of the EC, the EEC, and the RAC.

INSTRUCTION 14: BILATERAL AGREEMENTS BETWEEN UNITED STATES AND THE NETHERLANDS

The Chair asked Dr. Barnes and Dr. Knottnerus to explore existing bilateral connections between the Netherlands and the United States that could illuminate the SAB's evolving relationship with the Health Council.

ATTACHMENTS TO THE MINUTES OF THE MEETING OF THE EXECUTIVE COMMITTEE OF THE SCIENCE ADVISORY BOARD October 28-29, 1998

- Attachment A -- Sign-in sheets
- Attachment B -- Agenda
- Attachment C -- Mr. Joshua Baylson briefing on the Agency's Government Performance and Results Act (GPRA):
 - a) Managing for Results at EPA
 - b) Goals, Objectives, and Subobjectives
- Attachment D -- Science Advisory Board Advisory Committee
 Activity Summaries, July-October 1998
- Attachment E -- Draft Report: "Review of Disproportionate Impact Methodologies", EPA-SAB-IHEC-99-XXX
 - a) October 27, 1998 Memo from Mary O'Lone (OCR)to Donald Barnes, Roslyn Edson, & Dorothy Canter, re: Comments on Draft Report
- Attachment F -- Dr. Richard Bull's Draft Letter (10/21/98) to Drinking Water Committee Members re: SAB in Negotiated Rulemaking
- Attachment G -- October 29, 1998, Drinking Water Committee & Phase 2 Rule Making Negotiations
- Attachment H -- Interactions Between Advisory Groups
 - a) Letter to Dr. Barnes (September 21, 1998) from Dr. Deborah Gray, & Mr. Michael Pompili, ESAC, Columbus Health Department re: ESAC & EPA SAB
 - b) Michigan Environmental Science Board's Executive Orders, Membership, General Procedures, Publications List, October 1998
 - c) August 15, 1998, "Next Steps" Luncheon
 Discussion at 4th International Symposium
 (August 12, 1998)
 - d) Health Council of the Netherlands Brochure
 - e) Health Council of the Netherlands Overheads
- Attachment I -- a) September 2, 1998, Transmittal of the Final Report of FIFRA Scientific Advisory Panel (SAP) Meeting held July 29-30, 1998
 - b) FIFRA SAP Open Meeting October 14 & 15, 1998 Update
 - c) FIFRA SAP Draft (dated October 27, 1998) Open Meeting Agenda to be Held December 8-10, 1998
- Attachment J -- Dr. Norine E. Noonan, AA/ORD Bio
- Attachment K -- a) Final Minutes to SAB's EC September 11, 1998

 Public Conference Call Meeting
 - b) Final Minutes to SAB's EC August 27, 1998
 Public Conference Call Meeting
 - c) Final Minutes to SAB's EC July 8, 1998 Meeting

- Attachment L -- Elaine Stanley's Memo of October 14, 1998 to
 Henry Longest et al. Re: OECA's Response to
 the Reinvention Initiative on Use of Riskbased Models in Enforcement and Compliance
 Programs
- Attachment M -- Policy on Post-Report Activities, January 15, 1997
- Attachment N -- Policy for Public Disclosure at SAB Meetings Attachment O -- October 14, 1998 Draft #2 Report "An SAB
 - Review: Review of the D-CORMIX Model"
- Attachment P -- Comments Received October 27, 1998 on the EC Review Draft of the D-CORMIX Report from Keith Stolzenbach & Mike Kravitz
- Attachment Q -- Article "The Use of Stable Lead Isotopes to Identify and Apportion Sources of Lead in Urban House Dust" by Ellen K. Silbergeld et al.

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